

1. A probe for determining an oxygen concentration in a gas mixture, in particular in the exhaust gas of internal combustion engines, having a Nernst measuring cell, which has a first electrode (Nernst electrode) which is exposed to the gas mixture to be measured via a diffusion barrier, a second electrode (reference electrode) which is exposed to a reference gas, and a solid electrolyte body arranged between the first and the second electrode, and having a pump cell, which has a first electrode (inner pump electrode) which is exposed to the gas mixture via the diffusion barrier, a second electrode (outer pump electrode) which is exposed to the gas mixture, and a solid electrolyte body arranged between the first and the second electrode, the Nernst electrode and the inner pump electrode being connected at least in some sections via a joint supply conductor to a circuit arrangement for controlling and evaluating the probe, characterized in that a joint supply conductor resistor (R) of the Nernst electrode (16) and of the inner pump electrode (38) is formed by a loaded voltage divider whose individual resistors (R₁, R₂, R₃) are arranged so that the negative feedback of a Nernst voltage circuit and of a pump voltage circuit is optimized, in particular maximized.

2. The probe according to Claim 1, characterized in that an additional external resistor (R₄) is connected in series to the joint supply conductor section (56) of the Nernst measuring cell (12) and the pump cell (14).

3. The probe according to one of the preceding claims, characterized in that a cross section of the joint supply conductor section (56) is minimized.

4. The probe according to Claim 3, characterized in that the cross section of the supply conductor section (56) is smaller than a cross section of printed conductor sections (50, 54) via which the electrodes (16, 38) are connected to the contact point (52).

5. The probe according to one of the preceding claims, characterized in that a contact point (52), as far as which the electrodes (16, 38) are connected to the circuit arrangement (32) via the joint supply conductor section (56), is located directly downstream of the electrodes (16, 38) at a distance (a'), so that a distance (b') of the supply conductor section (56) is of maximum length.